Marked up version of claims showing changes made by the present amendments.

1. A method for alleviating or reducing the toxic, nutritional and metabolic disturbances associated with cancer and cancer chemotherapy comprising: administering to a patient *undergoing cancer chemotherapy* a composition ~~comprising~~ *consisting of* an effective amount of riboflavin, an effector of the urea cycle, and the amino acids alanine, glycine, serine, taurine, threonine and valine, *and a suitable solvent, diluent, or carrier*.

2. A method according to claim 1 wherein the effector of the urea cycle is arginine, ornithine or citrulline.

3. The method of claim 1 wherein the amino acids are in free form or pharmacologically acceptable salts.

4. The method of claim 1, wherein the concentration of riboflavin is about 5 to about 300 mg/L.

5. The method of claim 1, wherein the concentration of the effector of the urea cycle is about 2 to about 120 mg/L.

6. The method of claim 1, wherein the concentration of alanine is about 1 to about 90 mg/L, the concentration of glycine is about 1 to about 75 mg/L, the concentration of serine is about 1 to about 75 mg/L, the concentration of taurine is about 0.5 to about 30 mg/L, the concentration of threonine is about 1 to about 90 mg/L and the concentration of valine is about 1 to about 50 mg/L.

7. The method of claim 1, wherein said composition is administered enterally or parenterally.

8. The method of claim 1, wherein composition is administered intravenously.

9. The method of claim 1, wherein said composition further comprises at least one pharmaceutically-acceptable carrier, diluent, or excipient.

10. The method of claim 1, wherein the composition consists of riboflavin, arginine, alanine, glycine, serine, taurine, threonine, valine and a pharmaceutically-acceptable carrier or diluent.

11. The method of claim 10, wherein the concentration of riboflavin is about 5 to about 300 mg/L, the concentration of arginine is about 2 to about 120 mg/L, the concentration of alanine is about 1 to about 90 mg/L, the concentration of glycine is about 1 to about 75 mg/L, the concentration of serine is about 1 to about 75 mg/L, the concentration of taurine is about 0.5 to about 30 mg/L, the concentration of threonine is about 1 to about 90 mg/L and the concentration of valine is about 1 to about 50 mg/L.

12. The method of claim 1, wherein the composition consists of riboflavin, ornithine, alanine, glycine, serine, taurine, threonine, valine and a pharmaceutically-acceptable carrier or diluent..

13. The method of claim 12, wherein the concentration of riboflavin is about 5 to about 300 mg/L, the concentration of ornithine is about 2 to about 120 mg/L, the concentration of alanine is about 1 to about 90 mg/L, the concentration of glycine is about 1 to about 75 mg/L, the concentration of serine is about 1 to about 75 mg/L, the concentration of taurine is about 0.5 to about 30 mg/L, the concentration of threonine is about 1 to about 90 mg/L and the concentration of valine is about 1 to about 50 mg/L.

14. A pharmaceutical composition for alleviating or reducing the toxic, nutritional and metabolic disturbances associated with cancer and cancer chemotherapy ~~comprising~~ *consisting of*: an effective amount of riboflavin, an effector of the urea cycle, and the amino acids alanine, glycine, serine, taurine, threonine, and valine, *and a suitable solvent, diluent, or carrier*.

15. The pharmaceutical composition of claim 14, wherein the effector of the urea cycle is selected from arginine, ornithine or citrulline, wherein the effector is in free form or a pharmacologically acceptable salt.

16. The pharmaceutical composition of claim 14 wherein the amino acids are in free form or pharmacologically acceptable salts.

17. The pharmaceutical composition of claim 14, wherein the concentration of riboflavin is about 5 to about 300 mg/L.

18. The pharmaceutical composition of claim 14, wherein the concentration of the effector of the urea cycle is about 2 to about 120 mg/L.

19. The pharmaceutical composition of claim 14, wherein the concentration of alanine is about 1 to about 90 mg/L, the concentration of glycine is about 1 to about 75 mg/L, the concentration of serine is about 1 to about 75 mg/L, the concentration of taurine is about 0.5 to about 30 mg/L, the concentration of threonine is about 1 to about 90 mg/L and the concentration of valine is about 1 to about 50 mg/L.

20. The pharmaceutical composition of claim 14, having a pH of about 6.0 to about 7.0.

21. The pharmaceutical composition of claim 14, further comprising at least one pharmaceutically-acceptable carrier, diluent, or excipient.

22. The pharmaceutical composition of claim 14, consisting of riboflavin, arginine, alanine, glycine, serine, taurine, threonine, valine and a pharmaceutically-acceptable carrier or diluent.

23. The pharmaceutical composition of claim 22, wherein the concentration of riboflavin is about 5 to about 300 mg/L, the concentration of arginine is about 2 to about 120 mg/L, the concentration of alanine is about 1 to about 90 mg/L, the concentration of glycine is about 1 to about 75 mg/L, the concentration of serine is about 1 to about 75 mg/L, the concentration of taurine is about 0.5 to about 30 mg/L, the concentration of threonine is about 1 to about 90 mg/L and the concentration of valine is about 1 to about 50 mg/L.

24. The pharmaceutical composition of claim 14, consisting of riboflavin, ornithine, alanine, glycine, serine, taurine, threonine, valine and a pharmaceutically-acceptable carrier or diluent..

25. The pharmaceutical composition of claim 24, wherein the concentration of riboflavin is about 5 to about 300 mg/L, the concentration of ornithine is about 2 to about 120 mg/L, the concentration of alanine is about 1 to about 90 mg/L, the concentration of glycine is about 1 to about 75 mg/L, the concentration of serine is about 1 to about 75 mg/L, the concentration of taurine is about 0.5 to about 30 mg/L, the concentration of threonine is about 1 to about 90 mg/L and the concentration of valine is about 1 to about 50 mg/L.

26. A method for alleviating or reducing the toxic, nutritional and metabolic disturbances associated with cancer and cancer chemotherapy comprising: administering to a patient *undergoing cancer chemotherapy* a composition ~~comprising~~ *consisting of* an effective amount of riboflavin, an effector of the urea cycle comprising arginine and ornithine, and the amino acids alanine, glycine, serine, threonine and valine, *and a suitable solvent, diluent or carrier and optionally 3-phenylacetylamino-2,6-piperidinedione*.

27. The method of claim 26, wherein the composition further comprises 3-phenylacetylamino-2,6-piperidinedione.

28. The method of claim 26, wherein the composition consists of 0.01-10 wt % riboflavin, 1-15 wt % arginine, and 1-15 wt % ornithine, 1-15 wt % alanine, 1-15 wt % glycine, 1-15 wt % serine, 1-15 wt % threonine 1-15 wt % valine, and 25-75 wt % 3-phenylacetylamino-2,6-piperidinedione.

29. A pharmaceutical composition for alleviating or reducing the toxic, nutritional and metabolic disturbances associated with cancer and cancer chemotherapy ~~comprising~~ *consisting of*: an effective amount of riboflavin, an effector of the urea cycle comprising arginine and ornithine, and the amino acids alanine, glycine, serine, threonine and valine, *and a suitable solvent, diluent, or carrier and optionally 3-phenylacetylamino-2,6-piperidinedione*.

30. The pharmaceutical composition of claim 29, further comprising 3-phenylacetylamino-2,6-piperidinedione.

31. The pharmaceutical composition of claim 29, consisting of 0.01-10 % riboflavin, 1-15 % arginine, and 1-15 wt % ornithine, 1-15 wt % alanine, 1-15 wt % glycine, 1-15 wt % serine, 1-15 wt % threonine 1-15 wt % valine, and 25-75 wt % 3-phenylacetylamino-2,6-piperidinedione.